Appl. No. 10/511,341

Atty. Ref.: 4093-8

Amendment April 20, 2008

**AMENDMENTS TO THE CLAIMS:** 

Please amend the claims as follows:

Claims 1-67. (Canceled)

68. (Currently Amended) A cell line derived from a B-cell line which is adapted

for serum-free culture and in which the EBNA-1 gene of Epstein-Barr virus is expressed,

where a DNA construct comprising a DNA encoding  $G\alpha$  protein or a chimeric  $G\alpha$ 

protein at least one of the following (1) to (3) is integrated into a chromosomal DNA,

where at least one of the following (1) and (2) is optionally integrated into the

chromosomal DNA:

(1) DNA construct comprising a DNA encodingfor expression of a transcription

factor necessary for construction of an inducible expression system; and

(2) DNA construct where a reporter gene is ligated at the downstream area of a

promoter having a responsive element of a transcription factor; and

(3) DNA construct for expression of  $G\alpha$  protein or a chimeric  $G\alpha$  protein.

69. (Original) The cell line according to claim 68, wherein the cell line is a

Namalwa cell adapted for serum-free culture.

70. (Original) The cell line according to claim 69, wherein the Namalwa cell

adapted for serum-free culture is Namalwa KJM-1 cell.

71. (Original) The cell line according to claim 68, wherein the transcription factor

necessary for construction of the inducible expression system is a chimeric protein of a

ligand binding domain of estrogen receptor and yeast Gal4p.

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72. (Original) The cell line according to claim 68, wherein the responsive element of the transcription factor is cAMP responsive element (CRE), TPA responsive element (TRE), NFAT (nuclear factor of activated T cells) responsive element or serum responsive element (SRE).

73. (Original) The cell line according to claim 68, wherein the reporter gene is firefly luciferase gene, *Renilla reniformis* luciferase gene, chloramphenicol acetyltransferase gene,  $\beta$ -galactosidase gene,  $\beta$ -lactamase gene or green fluorescent protein gene.

74. (Original) The cell line according to claim 68, wherein the  $G\alpha$  protein is at least one  $G\alpha$  protein selected from the group consisting of  $G\alpha_{16}$ ,  $G\alpha_{15}$ ,  $G\alpha_{q}$ ,  $G\alpha_{11}$ ,  $G\alpha_{s}$ ,  $G\alpha_{i}$ ,  $G\alpha_{o}$ ,  $G\alpha_{z}$ ,  $G\alpha_{12}$ ,  $G\alpha_{13}$ ,  $G\alpha_{gust}$ ,  $G\alpha_{t}$  and  $G\alpha_{14}$ .

75. (Original) The cell line according to claim 68, wherein the chimeric  $G\alpha$  protein is at least one chimeric  $G\alpha$  protein selected from the group consisting of the following (1) to (20):

- (1) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted with C-terminal 5 amino acids of  $G\alpha_g$ ;
- (2) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted with C-terminal 5 amino acids of  $G\alpha_i$ ;
- (3) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted with C-terminal 5 amino acids of  $G\alpha_o$ ;

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(4) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted

with C-terminal 5 amino acids of  $G\alpha_Z$ ;

(5) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted

with C-terminal 5 amino acids of  $Ga_{12}$ ;

(6) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{13}$ ;

(7) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{gust}$ ;

(8) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted

with C-terminal 5 amino acids of Gα<sub>t</sub>;

(9) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{14}$ ;

(10) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{16}$ ;

(11) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_s$ ;

(12) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_i$ ;

(13) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_0$ ;

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(14) chimeric G  $\alpha$  protein where C-terminal 5 amino acids of G  $\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_Z$ ;

(15) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $Ga_{12}$ ;

(16) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{13}$ ;

(17) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{gust}$ ;

(18) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of Gα<sub>t</sub>;

(19) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{14}$ ; and

(20) chimeric  $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_q$  are substituted

with C-terminal 5 amino acids of  $G\alpha_{16}$ .

76. (Original) The cell line according to claim 68, wherein the transcription factor

necessary for construction of the inducible expression system is a chimeric protein of a

ligand binding domain of estrogen receptor and yeast Gal4p, the promoter having a

responsive element of the transcription factor is a promoter having a cAMP responsive

element (CRE) and the reporter gene is firefly luciferase gene or Renilla reniformis

luciferase gene.

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77. (Original) The cell line according to claim 68, wherein the transcription factor

necessary for construction of the inducible expression system is a chimeric protein of a

ligand binding domain of estrogen receptor and yeast Gal4p, the promoter having a

responsive element of the transcription factor is a promoter having a cAMP responsive

element (CRE), the reporter gene is firefly luciferase gene or Renilla reniformis

luciferase gene and the chimeric  $G\alpha$  protein is a chimeric  $G\alpha$  protein where C-terminal

5 amino acids of  $G\alpha_s$  are substituted with C-terminal 5 amino acids of  $G\alpha_q$  or a chimeric

 $G\alpha$  protein where C-terminal 5 amino acids of  $G\alpha_s$  are substituted with C-terminal 5

amino acids of  $G\alpha_i$ .

Claims 78-108. (Canceled)

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